DEPARTMENT of ENERGY

Meeting the Management Challenge



Department of Energy Meeting the Management Challenge

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The Department is meeting the President's challenge by changing its approach to managing its people and its resources. When the first scorecard was issued in 2002. the Department was one of the Federal Government's lowestrated agencies. Three years later, OMB ranked the Department among the top cabinet agencies in implementing the President's Management Agenda. This annual report shares highlights of the Department's accomplishments and future plans for each President's Management Agenda initiative.

Innovation in Managing **Human Capital**

The Department developed and has begun implementing a comprehensive human capital plan that addresses the Department's organizational structure, work force size, skill gaps, performance management systems, and diversity. Implementation of the human capital plan has yielded significant results. For example, the Department has restructured three of its largest components to improve accountability, efficiency, and performance. Since 2001, the Department has reduced its work force by

"The Department of Energy's human capital management efforts have been developed to establish a strategic and comprehensive approach to improve human capital processes and programs. Our goals are to include workforce planning as an integral part of the Department's planning, provide managers with the approaches, authorities and tools necessary to ensure that they can successfully meet their mission challenges and to make DOE a great place to work."

> Claudia Cross Chief Human Capital Officer

has been measurably improved as demonstrated on scorecards issued by OMB.

Using the human capital plan as a guide, the Department has also begun a comprehensive analysis of its critical missionrelated skills and occupations. Preliminary results indicate that the most significant skills gaps

> are in the following areas: leadership and management, especially conflict management, strategic thinking and vision; project management; human capital management; information technology; and contract management. These findings will be used in developing programs for reducing skills gaps.

over 8 percent (from 14,688 to 13,476 employees); trimmed the number of senior executive service (SES) employees by 7 percent (from 432 to 400 executives); and reduced non-SES senior staff by 9.2 percent (from 4,585 to 4,162 employees). These reductions were made

To close skills gaps in two mission critical areas, project and contract management, the Department instituted rigorous certification programs for project and contract managers. Through these programs, the Department's project and contract managers must meet while management performance stringent technical, educational,

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and experience standards to qualify for a project or contract management position. Ninety-six percent of contract managers have been certified. Fifty-two percent of incumbent project managers have been certified. The remaining project managers are on track to be certified by May 2006.

To re-tool its work force, the Department is also vigorously using Voluntary Separation Incentive Payment and Voluntary Early Retirement Incentive authorities. Fifty-nine percent of the Department's organizations are using these authorities to consolidate positions and phase out skill-sets that are no longer needed, providing the opportunity to recruit employees with skills critical to the Department's mission.

The Department's performance management and award systems have been strengthened by directly linking performance ratings with mission goals and holding employees accountable for results. To effectively distinguish between various levels of performance, the Department will eliminate the pass-fail performance systems that currently cover 38.5 percent of employees and implement a multi-level performance



management system

Department-wide beginning in fiscal year 2006.

The Department views the projected increase in retirements to be an opportunity for reshaping our work force into one with skills in such mission-critical areas as project and contract management. To prepare, the Department has determined the kinds of skills that will be needed to achieve our varied missions and has developed plans to recruit, retain, retrain, and/or outsource to build the required skill mix.

Examples of recruitment initiatives include a career intern program established to attract new talent into the National Nuclear Security Administration and the

SES candidate development program to identify future leaders. The Department is also using competitive sourcing to identify new skill sets to perform specific functions. The competitive sourcing study of the Department's financial services, along with the deployment of a new accounting system, identified the need for fewer highly-skilled technicians that allowed a reduction in staffing levels from 181 to 118.

To enhance the diversity of our work force, the Department launched the "Recruit America" campaign, which has targeted thousands of potential Hispanic employees and established a scholarship fund to provide internships to Hispanic students. Opportunities for women and

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minorities have also increased. Since 2001, the number of women and minorities in senior executive positions has increased by more than two percent. In addition, the Department has worked closely with the Walter Reed Army Medical Center to support the Transition Assistance

Program for soldiers wounded primarily during their service in Afghanistan and Iraq. The Department will continue to develop and implement strategies for recruiting and retaining women, minorities, and persons with disabilities.

Innovation in Competitive Sourcing

The Department of
Energy is proud to be recognized
as a leader in the area of
competitive sourcing and was
one of the first agencies to earn
a "green" status score for its
Competitive Sourcing Program.
In the Competitive Sourcing
Results Report, published in 2004,
OMB identified the Department's
competitive sourcing program
as a model for other Federal
agencies.

The goal of the Department's competitive sourcing

program is to use the benefits of competition to improve efficiency, reduce costs to the taxpayer, improve service delivery, and enhance program performance. Since 2002, the Department has completed six competitive sourcing studies covering 543 positions that

competition to deliver financial services. This competition resulted in a consolidation of the Department's financial transaction processing units, which allowed a reduction of staff from 181 to 118 with \$31 million in savings over the next five years.

"The Department has created an infrastructure to ensure that competitive sourcing is a carefully and regularly considered management option for enhancing performance and reducing costs. Since 2002, DOE has completed six competitive sourcing studies that are expected to achieve \$82 million in savings over a five-year period."

Dennis O'Brien
Director
Office of Competitive Sourcing

are expected to save \$82 million over a five-year period. The studies pitted Federal employees in a head-to-head competition with the private sector in the following areas: graphics, financial services, civil rights review, National Nuclear Security Administration logistics, Headquarters logistics and human resources – training.

The Department's in-house teams have won four of these competitions, including a large

In September 2004, the Department announced two new studies involving 724 positions. The first study, which covers positions at the New Brunswick Laboratory, will be completed by the end of FY 2005. The study is expected to reduce the cost of operating this laboratory, which provides state-of-the-art nuclear

material measurement services to the Department's National Laboratories as well as scientists around the world. The second study, covering environmental engineering services positions, will be concluded in FY 2006 and is expected to reduce the cost while improving the efficiency of the Department's environmental management program.

In FY 2006, the Department will launch one or more competitions. The positions to

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be studied will be identified following a review process that began in April 2005.

To ensure the winning bidders fulfill the commitments made in their proposals, the Department has established an Independent Verification and Validation process to certify that the winner of a competition is meeting the promised performance and cost targets. In December 2004, the first Independent Verification and Validation review was completed of the winner in the graphics study. Lessons learned from that review

have been used to further strengthen the competitive sourcing program. These include the need to better document improvements in efficiency, productivity, and costs as well as the need to better communicate with customers on operational improvements.

The Department has also taken steps to ensure that competitive sourcing is carefully and consistently considered as a management tool for enhancing performance and reducing costs. The Department's human

capital plans are used to help identify the functions for competition.

Innovation in Financial Performance

For six consecutive years, the Department has received a clean audit opinion on its financial statements with no material weaknesses. The Department has also improved the timeliness of its annual financial statements by reducing the timeline for issuance from 149 to just 46 days after the end of the fiscal year.

and a finance/accounting system, were successfully deployed in January and April 2005, respectively. Budget and procurement modules are being developed for deployment over the next two years. I-MANAGE will improve decision-making resources by providing managers with just-in-time data at their desktop. I-MANAGE is also expected to produce cost savings by integrating data systems, thereby reducing the need for duplicate data entry as well as reconciliation of data from multiple sources. Additional savings will result from eliminating redundant systems.

"The Financial Performance Initiative adds momentum to the Department's ongoing efforts to further improve the reliability and availability of integrated financial and performance information in support of sound operational decision-making."

Helen Sherman Director, Office of Finance and Accounting Policy

As part of the effort to consistently improve the availability and reliability of financial data, the Department launched an aggressive effort to build an integrated business management system – I-MANAGE. The initial components of this system, a data warehouse

Financial data provided by I-MANAGE will be used routinely by the Department to make better informed decisions about programs, worth hundreds of millions of dollars. For example, to reduce costs and improve efficiency, the Environmental

Management Program is establishing cost, schedule, and technical baselines for its entire cleanup program with life-cycle costs over \$100 billion. The National Nuclear Security Administration (NNSA) extracts obligation and cost data from the Department's Financial Data

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Warehouse and summarizes the data each month for the agency's senior officials as a key management tool for program evaluation. Extracting obligation and cost data helps NNSA program managers better evaluate programs by presenting data in an easily understood and readily usable format and by providing trending data from both current and past years. This allows program managers to evaluate progress through the analysis of cost and schedule performance.

The Department has also developed an aggressive plan to improve the quality of financial data in specific areas, such as project management and information technology. For each area, the Department is

identifying the necessary outcomes (e.g., reduced costs and improved efficiency), by determining how financial data will be used to achieve the outcome, and by identifying how progress will be measured. For example, the Department has established a goal of improving the reliability of project management performance data and using that data to ensure that on average projects are managed within 90 percent of cost, schedule, and performance targets.

Using this financial information, the Department implemented a rigorous process for monitoring its multi-million dollar construction projects to ensure that they adhere to cost, schedule, and performance targets. Monthly

reports are prepared evaluating project performance. Projects found to be off target are put on remediation plans or terminated. Prior to establishing this process, managers did not systematically review whether a project was on target or if cost overruns were rampant. This data provides managers with an "early warning system" to correct problems before they become intractable. The Department is evaluating strategies for making additional improvements and will implement improvement initiatives over the next year.

Innovation in E-Government

Over the past year, the Department has re-focused its e-government efforts on more effectively managing its information technology investment portfolio, improving its cyber security program, maturing its enterprise architecture, and enhancing controls on personnel security and physical access systems. These efforts address concerns cited in a November 2004 report issued by the Department's Office of Inspector General identifying information technology as an ongoing management challenge.

To improve management of its information technology (IT) investment portfolio and ensure

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that taxpayer dollars are used more effectively, the Department has established processes to ensure that IT investments are necessary, support the Department's mission, are managed on cost and schedule, and deliver the promised results. For example, beginning in 2004, all IT projects over \$5 million were subjected to a more rigorous review process requiring certification by the Department's Chief Information Officer (CIO)

and the sponsoring organization that the project is necessary, does not duplicate existing systems, and will yield the expected results. This process has proven effective in weeding out unnecessary or unfeasible projects. As of May 2005, the Department did not have any major IT investments on OMB's "Watch List," which includes IT investments across the Government that OMB has determined as not having a sufficient business case. In addition, the Department is in the process of revising a departmental directive to more clearly define information technology policies and requirements.

Once approved, the execution

of an IT project is reviewed quarterly by the IT Council to ensure that cost, schedule, and performance are within acceptable thresholds. To ensure the reliability of project performance data, the Department will implement earned value management systems for its major IT investments and ensure that their performance is within 90 percent of the baseline by the end of FY 2005.

"The e-gov initiative of the PMA has provided a roadmap for significant improvements in Department of Energy information technology management. We continue working on our enterprise architecture to improve our business processes and identify functions for consolidation. We have increased the security of our IT enterprise by certifying and accrediting more than 90% of our operating systems."

Rose Parkes
Chief Information Officer

IT projects are also reviewed quarterly by the Department's IT Council to ensure that they align with the Department's enterprise architecture, which is the "blueprint" for the Department's network of IT systems. In 2005, we will expand our review to identify duplicative systems, refocus

funding on mission priorities and drive business decisions.

This year the Department's enterprise architecture was successfully linked to the Federal Enterprise Architecture and achieved a Level 3 on the OMB Enterprise Architecture Maturity Model. In FY 2006, the enterprise architecture will be further integrated with the IT investment review process to avoid duplicative systems and

ensure alignment with mission goals. The Department will also begin to use enterprise architecture data to support our strategic planning process.

As part of the effort to reduce the number of systems, the Department began deployment of our new integrated business management system – I-MANAGE. As a result of the

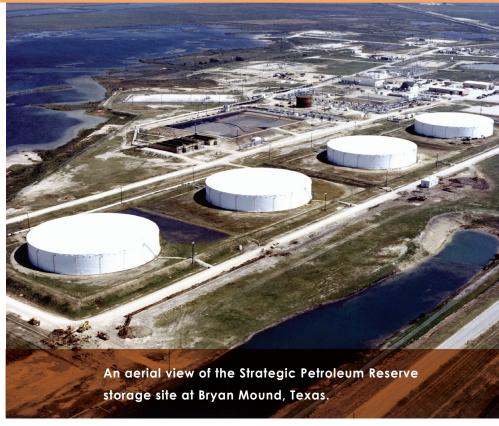
Department's success with I-MANAGE, OMB tapped the Department of Energy, along with the Department of Labor, to lead a Government-wide initiative to identify a crossagency financial management solution that improves performance and reduces

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the 120 overlapping financial management systems now in operation.

Cyber security has become an increasingly important priority across the Government. To tackle the Department's cyber security challenges, the CIO established requirements for minimum security configurations and contingency planning. To help implement the requirements and coordinate activities, the CIO established a council of cyber security experts from across the Department. The CIO also convened its annual cyber security training conference to share policies, requirements, and strategies for reducing cyber security vulnerabilities. As a result of these and other measures, the Department has certified that over 90 percent of its IT systems have protections in place to guard against potential attacks.

In 2005, the Department will certify all IT systems for cyber security. Any system that cannot be certified will be shut down. The Department will also install and maintain security configurations on 100 percent of all critical IT infrastructure and key IT resources and at least 80 percent of all other systems by November 2005. We will also



continue to reduce cyber security vulnerabilities through aggressive scanning and monitoring across the Department's enterprise.

To support physical security improvements, by October 2005 the Department will use technology to implement "smartcards" for employee identification. This effort is part of the Department's implementation of Homeland Security Presidential Directive-12.

Innovation in Budget and Performance Integration

The Department has made significant progress in integrating budget and performance.

Performance data from the Program Assessment Rating Tool (PART) reviews, the Department's 250 performance measures, and financial data are now being used to make better informed policy, program, resource, and operational decisions. Examples include:

Reducing funding for two Hanford Site clean up projects (K-Basin Facil ity Spent Nuclear Fuel Stabilization and Disposition and the Waste Treat ment Plant) due to delays in meeting project dead lines.

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ing of plutonium materials ahead of schedule at three sites (Hanford, Rocky Flats, and Savan nah River). In addition to reducing the risk to the public, this allowed the funds to be redirected thus speeding up environmental cleanup and risk reduction elsewhere in the complex.

The Department is ahead of schedule in implementing the PART process, a management tool devised by OMB to assess and compare program effectiveness across agencies of the Federal Government. OMB has assessed 83 percent of the Department's programs, exceeding their target of 80 percent across the government. The remaining programs

(17 percent) have been assessed internally.

The Department has embraced PART as an internal self-assessment tool. Based on PART reviews, the Department has:

Reduced funding to begin

- an orderly termination of the Fossil Energy oil and gas programs in the FY 2006 budget, after they were determined to duplicate private sector research.
- Increased FY 2006 funding for the Nuclear Hydrogen program based on positive performance results as demonstrated by internal PART reviews in both FY 2004 and FY 2005.

computer simulation costs for the Department's annual nuclear weapons certification to the President by more than 30 percent (from \$8.30 million to \$5.70 million) Through the use of more powerful and efficient computer platforms.

In addition, the Department expanded its consolidated quarterly management report to include a summary of our overall efficiency measure results. The

Department will enhance program performance by comparing programs using the same relative metrics and forming a working group to explore strategies for developing crosscutting performance measures.

The Department instituted multi-year budget planning by submitting five-year budget plans

for three major program offices (National Nuclear Security Administration – Weapons Activities, Office of Environmental Management, and Office of Science) with the FY 2006 budget submission. Beginning with the FY 2007 budget

"Budget and Performance Integration provides the means for ensuring that the Department of Energy remains focused on achieving results. By periodically assessing our performance against improvement objectives and closely linking our funding and resource decisions to program results, we ensure that each program continuously improves its effectiveness and efficiency in support of the overarching goals of the Department."

David Robinson
Senior Policy and Management Advisor
Office of Management, Budget and Evaluation

Efficiency measures have been developed for each of the Department's programs and staff offices with the goal of streamlining program management and reducing costs. An example of the results of this effort includes reducing

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request, the Department will submit integrated five-year plans for all programs and staff offices. In preparing the FY 2008-2012 budget submission, the Department will institute an enhanced planning process that informs the budget process. Benefits will include: greater discipline in budget decisions by considering them in a multiyear context and improving performance by increasing focus on the mission critical activities required to meet our strategic goals and objectives.

To make programs more accountable for results, the Department began applying the rigorous processes used for managing major construction projects to other program operations. Programs are required to conduct monthly self-assessments and report quarterly on their adherence to cost, schedule, and performance targets. This process enables senior managers to best allocate scarce resources among competing priorities.

The Department has developed a new tool for linking detailed performance and financial data. Tying costs to performance will result in more informed budget decisions by identifying the price for producing results. In FY 2006, the Department will complete its testing of this tool and begin linking actual performance and cost data. This is a significant step toward true budget and performance integration.

Finally, the Department's meaningful improvements in its financial and performance reporting speak for themselves. The Department's Performance and Accountability Report for fiscal year 2004 tied for 6th up from 12th in 2003 among Government agencies by the independent Mercatus Center in terms of transparency, public benefits, and leadership – using performance information to

"The Department has two resources to accomplish its many missions: its people and its infrastructure. DOE will continue to implement the management improvements needed to ensure the efficient and effective management of the Department's \$77 billion real property portfolio."

Jim Rispoli
Director
Office of Engineering and
Construction Management

identify solutions to perceived problems and to change future plans. The report also received the Association of Government Accountant's Certificate of Excellence in Accountability Reporting Award and we remediated the Department's performance measurement reportable condition that had existed since 1997. With the standards for excellence being raised each year, this recognition demonstrates our continuous improvements in performance measurement and performance reporting.

Innovation in Federal Real Property

The Department of Energy owns or controls a real estate portfolio worth \$70 billion. Taxpayers rightly expect the Department

to use sound business practices to manage this significant resource. To meet these expectations, the Department has issued an Asset Management Plan that provides guidelines and principles for managing the Department's real property portfolio. We have also completed plans for our 31 major sites outlining the

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actions that we will take to ensure that the facilities are aligned with and capable of supporting mission requirements. For the first time, an accurate and current inventory of the Department's real property was developed and is being used to make property management decisions. Finally, the Department has developed a sampling methodology to assess the accuracy of the real property inventory. This process has been used successfully to assess the inventory data at three sites.

To further improve property management, the Department is developing performance measures to assess progress that are consistent with guidance from the Federal Real Property Council. The measures will gauge the condition,

operating costs,
utilization rates, and
mission dependency
of the Department's
real property portfolio
and help determine
the efficiency
and effectiveness
of the portfolio's
management.

The Department will also implement changes to its

corporate real property inventory systems to ensure consistency with Federal Real Property
Council guidelines, develop and begin implementing a timeline to meet the goals and objectives of the Asset Management Plan, and collect and report inventory information consistent with Federal Real Property Council guidelines.

Innovation in Research and Development Investment Criteria

The costs and benefits of proposed research and development investments are being evaluated according to a new set of rigorous criteria. These criteria – Relevance, Quality, and Performance – are used not only when justifying projects and initiatives within the Department, but also in the

"The Department of Energy has played a leadership role in developing performance criteria for measuring the benefits of applied research and development programs. This approach allows decision makers to compare and contrast programs, make better budget decisions and will result in more effective use of taxpayers' dollars."

John R. Sullivan
Deputy Assistant Secretary for
Business Administration
Energy Efficiency and Renewable Energy

Program Assessment Rating Tool process and in budget proposals to OMB and the Congress.

The Department has demonstrated that more than 70 percent of its research and development programs are Moderately Effective or better as rated by the PART process. For the first time, energyrelated metrics were used by the applied research and development programs in the Department's Energy, Science, and Environment programs to inform budget priorities. The Department used data from these metrics to inform research and development budget decisions in developing the Department's FY 2006 budget proposal. The Department has developed and issued guidance for analyzing the Department's

research and development portfolio using standard methods and assumptions to estimate potential benefits of research and development programs. This guidance will be used to evaluate research and development investments proposed for the Department's FY 2007-2011 budget proposal.

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Other Management Challenges – Contract Management

Although contract management is not an initiative under the President's Management Agenda, it represents a significant management challenge for the Department of Energy. About three-fourths of the Department's budget is awarded to contractors each year. To ensure the Department receives expected deliverables and appropriately oversees contractor performance, the Department has implemented significant reforms. Examples include: increasing contract competition, especially for management and operating contracts, using more effective performance objectives and measures in contracts and instituting rigorous professional development requirements for contract management officials.

In a recent report, the
Government Accountability
Office (GAO) re-designated
the Department of Energy's
contract management
function as a high-risk area.
GAO acknowledged that the
Department has improved
contract management, but
found that the Department
needs to make further

improvements in managing and overseeing major projects. In another recent report, GAO recommended that the Department:

- Strengthen pre-contract award activities by developing a systematic approach to contracting and clarifying roles and responsibilities for reviewing contracts prior to award.
- Improve oversight of contract administration for major projects by conducting comprehensive self-assessments of contract administration, reducing the over reliance on contractor award data in awarding contract fees, and assessing the reliability of contractor project management systems.
- Enhance the performance of contracting officials and project directors by training contracting officials and project directors in Earned Value Management and providing project management training to program office officials.
- Improve the reliability and usefulness of project performance data by revising departmental guidance on reporting performance data, incorporating forward-looking

Deputy Secretary Clay Sell (left) is briefed at the Special Technologies Laboratory in Santa Barbara, California.

data into the Department's Project Assessment and Reporting System, updating data on a monthly basis, and improving the timeliness of performance data.

The Department is developing a comprehensive strategy for further improving its contract and project management functions. The strategy will address GAO's recommendations as well as other contact management issues identified by the Department.